

Fact Sheet

Darrow/Freezeout/Triangle Uranium Mine Preliminary Assessment

Introduction

The EPA has completed a Preliminary Assessment (PA) of the Darrow/Freezeout/Triangle abandoned uranium mines located approximately 13 miles north-northwest of Edgemont, South Dakota. The PA recommends that a Site Investigation be conducted to determine if hazardous substance releases from the abandoned mines are impacting sensitive environments. The EPA is planning to conduct this Site Investigation in 2015.

Background

Uranium was discovered in the Edgemont area in 1952. Early uranium mining was limited to surface deposits; however, later exploration revealed deeper deposits that were also mined. In the mid-1980s, the mining operations were halted due to the decline in uranium prices. The abandoned uranium mines consist of waste rock piles, seven open pits, underground workings and two open adits (tunnels). Currently, Powertech Uranium Corp. has leased property in the area and is pursuing licensing and permits needed to conduct the in-situ recovery of uranium. This proposed project is called the Dewey Burdock In-situ Recovery Project. Currently, the area is primarily used for cattle grazing.

Why did EPA conduct this Preliminary Assessment?

Ex. 5 Deliberative Process (DP)

What is a Preliminary Assessment?

A PA is an assessment of readily available information about a site and its surrounding area. The PA is designed to distinguish, based on limited data, between sites that pose little or no threat to human health and the environment and sites that may pose a threat and require further investigation. If the PA results in a recommendation for further investigation, a Site Investigation is performed.

What are the results of this Preliminary Assessment?

Ex. 5 Deliberative Process (DP)

1. Surface soils near the on-site waste piles contain levels of radionuclides above health based standards and are three times higher than background levels. Also, water samples from the impoundments contained radionuclides. Radionuclides identified include uranium, Ra-226 (radium-226), Th-230 (thorium-230), and Pb-210 (lead-210).

Ex. 5 Deliberative Process (DP)

3. Two domestic wells near the site contain levels of radium-226 that exceed the drinking water standard. One of these wells also has uranium levels that exceed the drinking water standard.
4. Analytical results of surface water in Pass Creek, Beaver Creek, and the Cheyenne River have found radionuclides.

Ex. 5 Deliberative Process (DP)

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How is this PA related to the Dewey-Burdock In-Situ Uranium Recovery Project?

These DFT mines are within and adjacent to the proposed Dewey-Burdock ISR Project, however, the PA is separate from decisions about the ISR Project or its underground injection control permits.

Who will be responsible for paying for work at this site?

In general EPA adheres to the polluter-pays principal meaning EPA looks for potentially responsible parties (PRPs) to assist or pay for investigations and cleanup of environmental problems they have caused. EPA also has the ability to perform work itself.